

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
30 September 2004 (30.09.2004)

PCT

(10) International Publication Number
WO 2004/083079 A3

(51) International Patent Classification⁷: **A47F 5/00**

(21) International Application Number:
PCT/US2004/007621

(22) International Filing Date: 12 March 2004 (12.03.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/454,999 14 March 2003 (14.03.2003) US

(71) Applicant (for all designated States except US): **SPACE-SAVER CORPORATION** [US/US]; 1450 Janesville Avenue, Fort Atkinson, WI 53558 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MUTH, James, C.** [US/US]; 3689 North Riverline Drive, Oconomowoc, WI 53066 (US). **NEMEC, Brian, R.** [US/US]; W7481 Pleasant Street, Delavan, WI 53115 (US). **JANSON, Steven, L.** [US/US]; 4615 Hwy. 73N, Deerfield, WI 53531 (US). **RUNGE, Marvin, L.** [US/US]; 75 Esat Curharken Drive,

Edgerton, WI 53534 (US). **DINGLE, Steve, S.** [US/US]; 5805 Running Deer Trail, McFarland, WI 53558 (US).

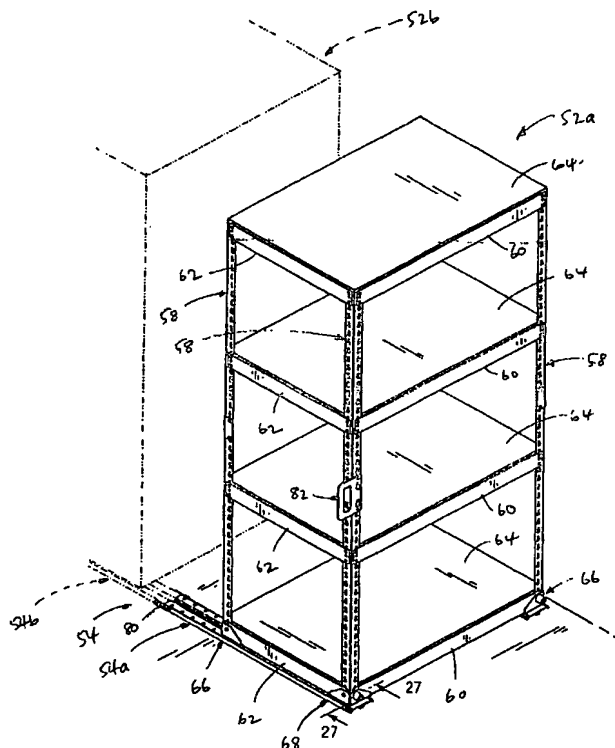
(74) Agent: **MCCONNELL, Andrew, S.**; Boyle, Fredrickson, Newholm, Stein & Gratz, S.C., 250 East Wisconsin Avenue, Suite 1030, Milwaukee, Wisconsin 53202 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,

[Continued on next page]

(54) Title: **VARIABLY CONFIGURABLE TRACK-TYPE MOBILE SHELVING SYSTEM**



(57) Abstract: A mobile storage system includes a series of storage units that include wheel assemblies that move on floor-mounted rails. The storage units, wheel assemblies and rails are produced and shipped in disassembled, knock-down kit form, and are assembled on-site in either a lateral high density configuration or a pull-out high density configuration. The user is able to selectively configure the storage units, the wheel assemblies and the rails to provide the desired configuration of the storage system.

WO 2004/083079 A3



GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
23 March 2006

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/07621

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A47F 5/00

US CL : 160/162

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 160/162, 151; 16/30, 43; 108/102; 312/201

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3,286,651 A (DAHL, JR) 22 November 1966 (22.11.1966), see entire document	1-14,24-31
Y		16,20-23,38-41
X	US 3,967,868 A (BAKER, JR.) 06 July 1976 (06.07.1976), see entire document	14,32-36
Y		15-23,37-41
A	US 4,807,765 A (BROWN et al) 28 February 1989 (28.02.1989), see entire document	1-41
Y	US 5,597,217 A (HOSKA et al) 28 January 1997 (28.01.1997), see entire document	15,17-19,37

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"B" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

28 December 2005 (28.12.2005)

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (571) 273-3201

Date of mailing of the international search report

14 FEB 2006

Authorized officer

Richard Chilcot

Telephone No. (703) 308-1020